From: Joseph Schons [solutions39@msn.com] Sent: Thursday, October 20, 2005 1:00 PM

To: Hancock, Kevin Subject: manure

## Hi Kevin

I know you're a busy guy but thought I'd drop you a line and see where it goes. My name is joe schons and I worked on a family owned dairy for about 30 years before going into the wastewater plant operation business. For the last ten years, privatr industry, conservation districts, and colleges have doing projects that involve using wastewater technology to treat dairy manure. Even I got into it using polymers to floc manure...pretty good results too.

I came to the conclusion one day that technology is what screwed up the industry. Backwash systems, freestalls, rainguns, and lagoons turned it into a non-point source nightmare. Additionally, the nutrient loading to the fields with a new emphasis on phosphorus has made this even more of a nightmare. In western washington the liquid manure problem is even worse that eastern. (We farmed on both side of the cascades).

I was as hyped as anyone when wastewater technology was being used to treat manure, polymers, belt presses, digesters, aerators, etc. What few seem to be looking at is how things were done in the past. Liquid manure production was a fraction then of what it is today. The new dairy is designed to handle liquid manure, which is the real problem.

In the old days, loafing sheds piled with bedding alowed the farmed to scrape a couple times a week. The manure with the bedding for bulking was piled for the winter and land applied in the spring. Usually, the piles composted which meant at least a 20-30% reduction in volume, nutrient uptake from the biology, and stabilization of nutrient which made them less soluble.

What I'm not seeing in permit systems and projects, is a return to solid manure and its benefits. Not to mention this methodology is available to dairies of ALL sizes, not just the big ones that can afford digesters and aeration tanks. Water abatement/composting is the only way all dairies can effectively decrease volume, nutrients, and runoff. Projects of this type seem to be rare...maybe because industry has nothing to gain financially. Whatever the reason, it would be great to see some grant funds applied to these projects. I know composting has been done for a number of years at different dairies, but it seems the whole idea of eliminating freestalls, lagoons, rainguns, etc. has not been triedin recent history.

Please pass these thoughts on to whom ever you think might be interested. I would be happy to do a brief on these ideas if you think it might help.

Best regards, Joe Schons 360-825-5487